F4RNA-PDMDM-2M5

HELIAX® 1/2" Superflexible Fire retardant SureFlex® Jumper with interface types 7-16 DIN Male and 7-16 DIN Male, 2.5 m

Product Classification

Product Type	Wireless transmission cable assembly
Product Brand	HELIAX® | SureFlex®
Product Series	RSJ4-50

General Specifications

Body Style, Connector A	Straight
Body Style, Connector B	Straight
Interface, Connector A	7-16 DIN Male
Interface, Connector B	7-16 DIN Male
Specification Sheet Revision Level	A

Dimensions

Length	2.5 m | 8.202 ft
Nominal Size	1/2 in

Electrical Specifications

DTF, Connector A	-32 dB
DTF, Connector B	-32 dB

Jumper Assembly Sample Label

F4RNA-PDMDM-2M5

Environmental Specifications

EN50575 CPR Cable EuroClass Fire Performance	B2ca
EN50575 CPR Cable EuroClass Smoke Rating	s1a
EN50575 CPR Cable EuroClass Droplets Rating	d1
EN50575 CPR Cable EuroClass Acidity Rating	a1
Immersion Test Method	Meets IEC 60529:2001, IP68 in mated condition

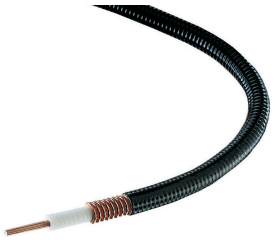
Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

Included Products

FSJ4RK-50B	–	FSJ4RK-50B, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 1/2 in, black non-halogenated, fire retardant polyolefin jacket B2ca-s1a-d1-a1 (CPR testing is conducted annually please reference the website for latest classification)

FSJ4RK-50B



FSJ4RK-50B, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 1/2 in, black non-halogenated, fire retardant polyolefin jacket B2ca-s1a-d1-a1 (CPR testing is conducted annually please reference the website for latest classification)

Product Classification

Product Type	Coaxial wireless cable
Product Brand	HELIAX® | SureFlex®
Product Series	FSJ4-50B
Ordering Note	ANDREW® standard product in Asia Pacific

General Specifications

Product Number	520094502/00 | SZ520094502/00
Flexibility	Superflexible
Jacket Color	Black
Performance Note	Attenuation values typical, guaranteed within 5%

Dimensions

Diameter Over Dielectric	8.89 mm | 0.35 in
Diameter Over Jacket	13.462 mm | 0.53 in
Inner Conductor OD	3.556 mm | 0.14 in
Outer Conductor OD	12.192 mm | 0.48 in
Nominal Size	1/2 in

Electrical Specifications

Cable Impedance	50 ohm ±1 ohm
Capacitance	82.7 pF/m | 25.207 pF/ft
dc Resistance, Inner Conductor	2.69 ohms/km | 0.82 ohms/kft
dc Resistance, Outer Conductor	5.12 ohms/km | 1.561 ohms/kft
dc Test Voltage	2500 V
Inductance	0.207 µH/m | 0.063 µH/ft
Insulation Resistance	100000 MOhms-km
Jacket Spark Test Voltage (rms)	4000 V

FSJ4RK-50B

Operating Frequency Band	1 – 10200 MHz
Peak Power	22.5 kW
Velocity	81 %

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
680–800 MHz	1.201	20.8
800–960 MHz	1.201	20.8
1700–2200 MHz	1.201	20.8
2300–2700 MHz	1.201	20.8

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
1.0	0.327	0.1	22.5
1.5	0.401	0.122	22.5
2.0	0.463	0.141	22.5
10.0	1.044	0.318	10.12
20.0	1.485	0.453	7.11
30.0	1.828	0.557	5.78
50.0	2.377	0.724	4.44
85.0	3.13	0.954	3.38
88.0	3.187	0.971	3.32
100.0	3.406	1.038	3.1
108.0	3.546	1.081	2.98
150.0	4.214	1.285	2.51
174.0	4.558	1.389	2.32
200.0	4.908	1.496	2.15
204.0	4.96	1.512	2.13
300.0	6.095	1.858	1.73
400.0	7.121	2.17	1.48
450.0	7.592	2.314	1.39
460.0	7.684	2.342	1.37
500.0	8.042	2.451	1.31
512.0	8.148	2.483	1.3
600.0	8.891	2.71	1.19

700.0	9.683	2.951	1.09
800.0	10.431	3.179	1.01
824.0	10.605	3.232	1
894.0	11.101	3.383	0.95
960.0	11.555	3.522	0.91
1000.0	11.824	3.604	0.89
1218.0	13.226	4.031	0.8
1250.0	13.423	4.091	0.79
1500.0	14.906	4.543	0.71
1700.0	16.027	4.885	0.66
1794.0	16.537	5.04	0.64
1800.0	16.57	5.05	0.64
2000.0	17.624	5.371	0.6
2100.0	18.137	5.528	0.58
2200.0	18.641	5.682	0.57
2300.0	19.138	5.833	0.55
2500.0	20.11	6.129	0.53
2700.0	21.056	6.418	0.5
3000.0	22.432	6.837	0.47
3400.0	24.198	7.375	0.44
3600.0	25.055	7.636	0.42
3700.0	25.478	7.765	0.41
3800.0	25.898	7.893	0.41
3900.0	26.314	8.02	0.4
4000.0	26.727	8.146	0.4
4100.0	27.136	8.271	0.39
4200.0	27.542	8.394	0.38
4300.0	27.946	8.517	0.38
4400.0	28.346	8.639	0.37
4500.0	28.744	8.761	0.37
4600.0	29.139	8.881	0.36
4700.0	29.531	9.001	0.36
4800.0	29.921	9.119	0.35
4900.0	30.308	9.238	0.35
5000.0	30.693	9.355	0.34

6000.0	34.427	10.493	0.31
8000.0	41.403	12.619	0.26
8800.0	44.054	13.427	0.24
10000.0	47.914	14.603	0.22

Material Specifications

Dielectric Material	Foam PE
Jacket Material	Non-halogenated, fire retardant polyolefin
Inner Conductor Material	Copper-clad aluminum wire
Outer Conductor Material	Corrugated copper

Mechanical Specifications

Minimum Bend Radius, multiple Bends	31.75 mm | 1.25 in
Minimum Bend Radius, single Bend	31.75 mm | 1.25 in
Number of Bends, minimum	30
Number of Bends, typical	50
Tensile Strength	79 kg | 174.165 lb
Bending Moment	2.7 N-m | 23.897 in lb
Flat Plate Crush Strength	2 kg/mm | 111.995 lb/in

Environmental Specifications

Installation temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Storage Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Attenuation, Ambient Temperature	68 °F | 20 °C
Average Power, Ambient Temperature	104 °F | 40 °C
Average Power, Inner Conductor Temperature	212 °F | 100 °C
EN50575 CPR Cable EuroClass Fire Performance	B2ca
EN50575 CPR Cable EuroClass Smoke Rating	s1a
EN50575 CPR Cable EuroClass Droplets Rating	d1
EN50575 CPR Cable EuroClass Acidity Rating	a1
Fire Retardancy Test Method	IEC 60332-1-2 | NFPA 130-2010 | UL 1666/CATVR/CMR
Smoke Index Test Method	IEC 61034

Toxicity Index Test Method	IEC 60754-1 | IEC 60754-2

Packaging and Weights

Cable weight	0.24 kg/m | 0.161 lb/ft

Regulatory Compliance/Certifications

Agency	Classification
CENELEC	EN 50575 compliant, Declaration of Performance (DoP) available
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.andrew.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant
UL/ETL Certification	CATVR/CMR